International Astronomical Union Symposium "New Frontiers in Black Hole Astrophysics"
12-16 September 2016, Cankarjev dom, Ljubljana, Slovenia
blackholes2016.si

Some interesting participants

Sheila Rowan:

Professor Rowan is the Director of the Institute for Gravitational Research at the University of Glasgow and has been recently appointed Chief Scientific Adviser for Scotland. Her research is targeted at developing optical materials for gravitational wave detectors. Her work has been crucial for the Advanced LIGO upgrades that contributed to one of the biggest scientific discoveries of the century: the first direct detection of gravitational waves.
Scientific achievements of Professor Rowan have been acknowledged with numerous awards: she received a Leverhulme Prize for Astronomy and Astrophysics in 2005, Royal Society Wolfson Research Merit Award in 2010 and was a recipient of the Hoyle Medal and Prize in 2016. She also participated in a share of the 2016 Special Breakthrough Prize in Fundamental Physics with the members of her team in Glasgow.

Mark Hannam

Prof. Mark Hannam, from the Cardiff University's School of Physics and Astronomy, uses computer simulations to model extreme gravitational systems, for example, two black holes that orbit each other, inspiral together, and merge to form a single black hole. As a result, the work by his team produces theoretical model predictions of what the gravitational waves emitted from black hole collisions should look like. In particular, his models provided a guidance for the LIGO team to interpret their measurements of the gravitational wave observations and claim the discovery of gravitational wave signal in 2015.

Shortly after the discovery, Prof. Hannam said for the BBC News:

"Actually seeing the signal that we had been calculating coming out of the data was incredible. It's a bit like learning a foreign language - you practice and practice and then you travel abroad and suddenly things happen - it's just amazing."

Virginia Trimble

Dr. Trimble is a professor of Physics & Astronomy at the University of California, Irvine, and a staff member of Las Cumbres Observatory (Santa Barbara). Her scientific interests include the structure and evolution of stars, galaxies and the Universe, and of the communities of scientists who study them.

She is one of the pioneers of female involvement in astronomy. She obtained her PhD from the California Institute of Technology (Caltech) in 1968, at the time when Caltech did not admit female students "except under exceptional circumstances". She was also the second woman allowed access to the Palomar Observatory.

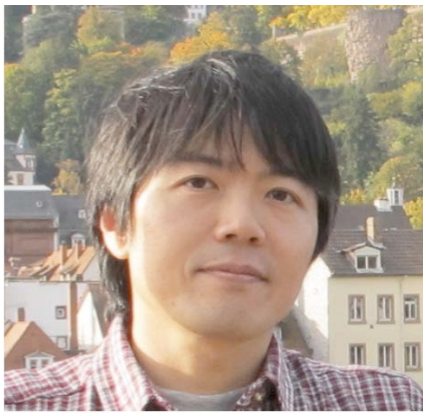
For her remarkable contributions to the field, Prof. Trimble received numerous rewards, e.g. the NASA Award for Scientific Reviewing in 1986, the Klopsteg Memorial Award from the American Association of Physics Teachers in 2001 and the George Van Biesbroeck Prize in 2010, for "many years of dedicated service to the national and international communities of astronomers, including her expert assessments of progress in all fields of astrophysics and her significant roles in supporting organizations, boards, committees and foundations in the cause of astronomy".

Carole Mundell

Dr. Carole Mundell is a professor of Extragalactic Astronomy and Head of Astrophysics at the University of Bath. She is an observational astrophysicist, who began her research career as a radio astronomer at Jodrell Bank Observatory in the UK. At the Liverpool John Moores University she built and led an international team specializing in catching the fast-fading light from Gamma Ray Bursts – the most powerful explosions in the Universe. Her current work is focused on exploiting the reach of international observatories, probing different energy ranges, with the goal of understanding cosmic black holes and their environments.

Professor Mundell is a passionate advocate for diversity in science and active communicator of science to the public. She is currently involved in a number of UK and European research funding allocation panels which oversee various astronomical facilities.

Susumu Inoue

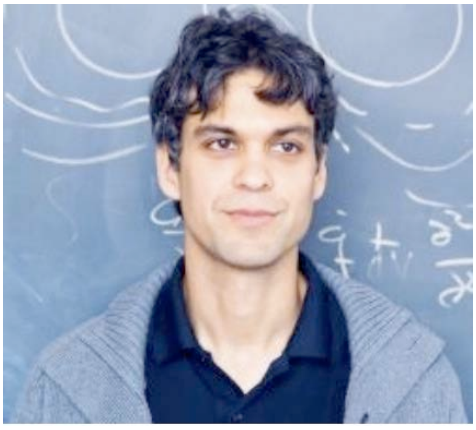


Dr. Inoue studies signals from black holes at the highest energies, in a class of astrophysical systems known as Active Galactic Nuclei (AGN). Those signals are produced by the jets of particles violently emitted from supermassive black holes at the centers of galaxies, as a result of its interaction with the surrounding gas and stars.

He is also taking a prominent role in the optimization of observational strategies of these objects with the future Cherenkov Telescope Array (CTA) experiment, currently under construction at two sites, at the European Southern Observatory in Chile and at La Palma, Canary islands.

He is a research scientists at the newly founded prestigious RIKEN, Astrophysical Big Bang Laboratory, in Saitama, Japan.

Enrico Ramirez Ruiz



Dr. Ruiz is a professor and chair of astronomy and astrophysics at UC Santa Cruz, USA. His work focuses on the physics of transient astronomical phenomena such as exploding stars and gamma-ray bursts. He also made significant contribution to the field of 'tidal disruption events', modeling final stages of life of stars, which approach supermassive black holes too closely and are torn apart by its forces.

He was recently rewarded a prestigious Niels Bohr Professorship by the Danish National Research Foundation.

Priyamvada Natarajan

Dr. Natarajan is a Professor in the Department of Astronomy and Physics at Yale University in the USA. Her work spans a wide range of topics in the fields of cosmology, gravitational lensing and black hole physics. In particular, she extensively studied the formation of the first black holes and their assembly history over cosmic time.

She received a number of awards and fellowships during her career: she was a Fellow at the Radcliffe Institute for Advanced Study at Harvard University and held the Emeline Bigelow Conland and Guggenheim Fellowships.

Professor Natarajan takes an active role in the Steering Committee of Womens Faculty Forum at Yale, from 2003, and was the Chair of this institution in the period 2011 – 2013. She is active in the public dissemination of science and is on the Advisory Board of NOVA program ScienceNow.

Željko Ivezić

Dr. Ivezić, a Croatia native, is a professor at the Astronomy Department, University of Washington. He obtained his University degree from the University of Zagreb and his PhD at the University of Kentucky, USA. After research years at the Princeton University he obtained professorship at the University of Washington. Currently, he holds a prestigious role of the Project Scientist of the Large Synoptic Survey Telescope project (LSST), one of the biggest current projects in astronomy today.

The LSST is a new type of telescope that allows astronomers to observe faint objects and large areas of sky at once. Among its many scientific goals, LSST will reveal new classes of neutron star and black hole binaries and it will observe variability at the centers of distant galaxies, exposing to us the feeding habits of the supermassive black holes residing there. In his role as a project scientists, Professor Ivezić oversees the development of these core-science projects, whose results we will be hearing about in the years to come.

Andreja Gomboc

Dr. Gomboc is a Professor of Astronomy at the University of Nova Gorica and Chair of the Scientific Organizing Committee of this symposium. Her research fields are transient objects such as gamma ray bursts and tidal disruptions of stars in the vicinity of black holes.

She obtained her PhD degree at the Faculty of Mathematics and Physics at the University of Ljubljana. She was a Marie Curie post-doctoral fellow at the Liverpool John Moores University, UK, where she became involved in observations of optical afterglows of gamma ray bursts with the world's largest robotic telescopes. Currently, she is also a member of the Science Alerts Team for the European Space Agency's mission Gaia.

Her contributions to astronomy were acknowledged with national and international awards: the Times Higher Education Award for research project of the year in 2007, with the research group at the Liverpool John Moores University, Excellent in Science in 2013, Top 10 Achievements of the University of Ljubljana in 2014 and Zois Award in 2015.

Prof. Gomboc is a passionate science communicator to the public – she regularly gives lectures and publishes popular science articles on astronomy, she is the founder and editor of the web portal portalvvesolje.si. She is also the president of the national committee for astronomy competitions, organized since 2009 by the Society of Mathematicians, Physicists and Astronomers of Slovenia, helping involve young astronomy enthusiasts in this fascinating field.